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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/073,213	02/13/2002	Takeshi Nagashima	46275	4799
20736	7590	03/16/2004	EXAMINER	
MANELLI DENISON & SELTER 2000 M STREET NW SUITE 700 WASHINGTON, DC 20036-3307			SHEWAREGED, BETELHEM	
			ART UNIT	PAPER NUMBER
			1774	

DATE MAILED: 03/16/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	10/073,213	NAGASHIMA ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Betelhem Shewareged	1774	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 08 December 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 7-11 is/are rejected.
- 7) ☒ Claim(s) 4-6, 12 and 13 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

1. Applicant's response filed on 12/08/2003 has been fully considered. Claims 12 and 13 are added, thus claims 1-13 are pending.

### ***Claim Rejections - 35 USC § 102***

2. Claims 1, 2, 7-9 and 11 are rejected under 35 U.S.C. 102(b) as being anticipated by Anderson et al. (US 6,096,469).

Anderson discloses an ink jet receptor media having a substrate and an ink receptor media on the substrate (abstract). The substrate is a polyester polymeric film (col. 10, line 38). The ink receptor media comprises particles (col. 4, line 39) and hydrophilic binder such as polyvinyl alcohol (col. 9, line 25). For applications in which transparency is desired, the particles have a mean particle size of about 10 to less than 50 nm (col. 6, line 66). The particles are silica prepare by wet process and comprise silane group (col. 7, lines 6-49). The ink receptor media may be coated on both sides of the substrate (col. 11, line 6), and the ink receptor media coated on the backside of the substrate is equivalent to the claimed back-coating layer. With respect to void ratio value it is elementary that the mere recitation of newly discovered function or property, inherently possessed by things in the prior art, does not cause a claim drawn to those things to distinguish over the prior art. *In re swinehart et al.*, 169 USPQ 226 at 229. Since the Anderson reference teaches all of Applicant's claimed compositional and positional limitations, it is inherent that the reference article function in the same manner

claimed by Applicant. The burden is upon Applicant to prove that the subject matter shown to be in the prior art does not possess the characteristic relied on.

***Claim Rejections - 35 USC § 103***

3. Claims 3 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Anderson et al (US 6,096,469), as applied to claims 1, 2, 7-9 and 11, above.

Anderson further teaches that the ink receptor media comprises cationic polymers that are pigment particles (col. 9, lines 62-65). However, Anderson fails to disclose the particle size of the cationic polymer particles. The experimental modification of this prior art in order to ascertain optimum operating conditions fails to render applicants' claims patentable in the absence of unexpected results. *In re Aller*, 105 USPQ 233. One of ordinary skill in the art would have been motivated to adjust the particle size in order to optimize the ink fixing property of the layer. A prima facie case of obviousness may be rebutted, however, where the results of the optimizing variable, which is known to be result-effective, are unexpectedly good. *In re Boesch and Slaney*, 205 USPQ 215.

Anderson does not expressly disclose the solid content of the ink receptor media applied on either side of the substrate. The experimental modification of this prior art in order to ascertain optimum operating conditions fails to render applicants' claims patentable in the absence of unexpected results. *In re Aller*, 105 USPQ 233. One of ordinary skill in the art would have been motivated to adjust the solid content of the receptor media applied on either side of the substrate in order to optimize curling and

ink-absorbing properties of the layer. A prima facie case of obviousness may be rebutted, however, where the results of the optimizing variable, which is known to be result-effective, are unexpectedly good. *In re Boesch and Slaney*, 205 USPQ 215.

### ***Response to Arguments***

4. Applicant's argument is based on that the prior art does not disclose or suggest one of the most important features of the present invention, i.e., "a void ratio of at least one of back-coating layers is 70% by volume or less". This is not persuasive because, in the previous rejection the Examiner did not indicated that the above limitation is disclosed in the prior art. Rather, the examiner showed that the layer on the back side of the prior art's receptor media posses the above limitation, because the receptor media of the prior art and the claimed recording material are substantially identical in structure (see paragraph 2, above).

Applicant also argued that the back coating layer of the present invention is not intended to carry out ink jet recording. This argument is not persuasive because none of the claims recite such limitation, i.e., back coating layer to which no ink jet recording is carried out.

Applicant further argued that the polyester film to be used as the substrate of the prior art is not transparent. This argument is not persuasive because the receptor media of the prior art, in one embodiment, may be use for an overhead transparency, therefore, in this case the polyester film support must be transparent. It should clear

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that no person of ordinary skill in the art uses an opaque recording media as an overhead transparency.

The ink jet recording media of the prior art functions in the same manner as the claimed ink jet recoding material because, as showed in the previous Office Action (also see paragraph 2, above), the ink jet recording media of the prior art and the claimed ink jet recoding material are substantially identical in structure. Where the claimed and prior art products are identical or substantially identical in structure or are produced by identical or substantially identical processes, a *prima facie* case of either anticipation or obviousness will be considered to have been established over functional limitations that stem from the claimed structure. *In re Best*, 195 USPQ 430, 433 (CCPA 1977), *In re Spada*, 15 USPQ2d 1655, 1658 (Fed. Cir. 1990). The ***prima facie*** case can be rebutted by evidence showing that the prior art products do not necessarily possess the characteristics of the claimed product. *In re Best*, 195 USPQ 430, 433 (CCPA 1977).

#### ***Allowable Subject Matter***

5. Claims 4-6, 12 and 13 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The prior are neither teaches nor suggests having two ink receptor media of outermost ink receptor media and innermost ink receptor media, wherein the outermost media comprising alumina or alumina hydrate having the claimed particle size and the innermost media comprising fumed silica having the claimed particle size.

***Conclusion***

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Betelhem Shewareged whose telephone number is 571-272-1529. The examiner can normally be reached on Mon.-Thur. 7:30AM-6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Cynthia H Kelly can be reached on 571-272-1526. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Betelhem Shewareged  
March 6, 2004.